

AMENDMENTS TO THE CLAIMS

Kindly amend the claims, without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents, as follows:

1. (Currently Amended) A method of providing a toothed~~Toothed~~ belt for use with in oil, the belt method comprising:

providing a toothed belt and adapting said toothed belt for use in substantially continuous contact with oil or partially immersed in oil, said belt comprising

a body,

a plurality of teeth extending from at least a first surface of said body, said teeth being coated by a first fabric, and

a plurality of resistant inserts;

wherein said resistant inserts comprise ~~twisted yarns produced from~~ fibers of at least a first and a second material and said first fibrous material entirely surrounds said second fibrous material;

said first and second materials are chosen from the group consisting of glass fibers, aramid fibers, polyester fibers, PBO fibers, and ~~wherein the first material comprises glass fibers and the second material comprises carbon fibers, and twisted yarns of the first material are wound around a twisted yarn of the second material, covering the second material entirely;~~

~~wherein said resistant inserts have a modulus value of greater than 28 N/mm; and~~

~~wherein said toothed belt is adapted to operate in substantially continuous contact with oil or partially immersed in oil~~

said body comprising as main elastomeric material a copolymer formed from a diene and from a monomer containing nitrile groups in a percentage between 33 and 49 weight percent with respect to the final copolymer.

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) ~~Toothed belt as claimed in~~ The method of claim 31, wherein said first material has a lower modulus with respect to said second material.

5. (Currently Amended) ~~Toothed belt as claimed in~~ The method of claim 1, wherein, in section, said second material occupies a sectional surface between about 15% and about 75% of a total sectional surface of the body.

6. (Currently Amended) ~~Toothed belt as claimed in~~ The method of claim 5, wherein, in section, said second material occupies a sectional surface between about 35% and 45% of a total sectional surface of the body.

7. (Currently Amended) ~~Toothed belt as claimed in~~ The method of claim 1, characterized in that said resistant inserts include two twists in the same direction.

8. - 10. (Cancelled)

11. (Currently Amended) ~~Toothed belt as claimed in~~ The method of claim 1, wherein said resistant inserts have been treated with an RFL comprising a latex suitable to resist oils.

12. (Currently Amended) ~~Toothed belt as claimed in~~ The method of claim 11, wherein said latex comprises an elastomeric material formed from a copolymer obtained from a diene monomer and a monomer containing nitrile groups.

13. (Currently Amended) ~~Toothed belt as claimed in~~ The method of claim 12, wherein said copolymer is formed from a diene and from a monomer containing nitrile groups in a percentage between 33 and 49 weight % with respect to the final copolymer.

14. (Currently Amended) ~~Toothed belt as claimed in~~ The method of claim 13, wherein said copolymer is formed from a diene and from a monomer containing nitrile groups in a percentage of 39 weight %.

15. (Currently Amended) ~~Toothed belt as claimed in~~ The method of claim 1, wherein said fabric is externally coated by a resistant layer, which comprises a fluorinated plastomer, a first elastomeric material and a vulcanizing agent; and in that said fluorinated plastomer is present in said resistant layer in an amount greater than said first elastomeric material.

16. (Currently Amended) ~~Toothed belt as claimed in~~ The method of claim 15, wherein said body comprises a mixture based on a second elastomeric material formed from a copolymer obtained from a diene monomer and a monomer containing nitrile groups.

17. (Currently Amended) ~~Toothed belt as claimed in~~ The method of claim 15, wherein said resistant layer comprises said fluorinated plastomer in an amount in weight between 101 and 150 parts in weight with respect to said first elastomeric material.

18. (Currently Amended) ~~Toothed belt as claimed in~~ The method of claim 15, wherein said fluorinated plastomer is polytetrafluoroethylene.

19. (Currently Amended) ~~Toothed belt as claimed in~~ The method of claim 15, wherein a back of said belt is covered by a second fabric.

20. (Currently Amended) ~~Toothed belt as claimed in~~ The method of claim 19, wherein said second fabric is externally coated by a second resistant layer.

21. (Currently Amended) ~~Toothed belt as claimed in~~ The method of claim 20, wherein said second resistant layer is the same as said first resistant layer.

22. (Currently Amended) ~~Toothed belt as claimed in~~ The method of claim 15, wherein said elastomeric material comprises fibers.

23. (Currently Amended) ~~Toothed belt as claimed in~~ The method of claim 22, wherein said fibers are present in an amount in weight between 0.5 and 15% with respect to said elastomeric material.

24. (Currently Amended) ~~Toothed belt as claimed in~~ The method of claim 1, wherein said toothed belt comprises, between the toothing and a back surface of said belt, sides treated with a polymer resistant to swelling.

25. (Currently Amended) Timing control system for a motor vehicle comprising at least one driving pulley, one driven pulley, a toothed belt adapted for use in substantially continuous contact with oil or partly immersed in oil, and materials for maintaining said toothed belt in an oil-wet condition; said toothed belt comprising a body, and one or more teeth extending from at least a first surface of said body, said teeth being covered by a first fabric, and a plurality of resistant inserts, wherein said resistant inserts comprise fibers of twisted yarns produced from at least a first and a second material and said first fibrous material entirely surrounds said second fibrous material; said first and second materials are chosen from the group consisting of glass fibers, aramid fibers, polyester fibers, PBO fibers, and, ~~wherein the first material comprises glass fibers and the second material comprises carbon fibers; and twisted yarns of the first material are wound around a twisted yarn of the second material, covering the second material entirely; and wherein said resistant inserts have a modulus of greater than 28 N/mm~~ said body comprising as main elastomeric material a copolymer formed from a diene and from a monomer containing nitrile groups in a percentage between 33 and 49 weight percent with respect to the final copolymer.

26. (Cancelled)

27. (Cancelled)

28. (Currently Amended) Control system as claimed in claim ~~27~~25, wherein said first material has a lower modulus with respect to said second material.

29. (Previously Presented) Control system as claimed in claim 25, wherein, in cross-section, said second material occupies a surface between about 15% and about 75% of a total sectional surface of the body.

30. (Previously Presented) Control system as claimed in claim 29, wherein, in cross-section, said second material occupies a surface between about 35% and 45% of a total sectional surface of the body.

31. (Previously Presented) Control system as claimed in claim 25, wherein said resistant inserts include two twists in the same direction.

32. - 34. (Cancelled)

35. (Previously Presented) Control system as claimed in claim 25, wherein said resistant inserts have been treated with an RFL comprising a latex suitable to resist oils.

36. (Previously Presented) Control system as claimed in claim 35, wherein said latex comprises an elastomeric material formed from a copolymer obtained from a diene monomer and a monomer containing nitrile groups.

37. (Previously Presented) Control system as claimed in claim 36, wherein said copolymer is formed from a diene and from a monomer containing nitrile groups in a percentage between 33 and 49 weight % with respect to the final copolymer.

38. (Previously Presented) Control system as claimed in claim 37, wherein said copolymer is formed from a diene and from a monomer containing nitrile groups in a percentage of 39 weight %.

39. (Previously Presented) Control system as claimed in claim 25, wherein said fabric is externally coated by a resistant layer, which comprises a fluorinated plastomer, a first elastomeric material and a vulcanizing agent; and in that said fluorinated plastomer is present in said resistant layer in an amount greater than said first elastomeric material.

40. (Previously Presented) Control system as claimed in claim 39, wherein said body comprises a mixture based on a second elastomeric material formed from a copolymer obtained from a diene monomer and a monomer containing nitrile groups.

41. (Previously Presented) Control system as claimed in claim 39, wherein said resistant layer comprises said fluorinated plastomer in an amount in weight between 101 and 150 parts in weight with respect to said first elastomeric material.

42. (Previously Presented) Control system as claimed in claim 39, wherein said fluorinated plastomer is polytetrafluoroethylene.

43. (Previously Presented) Control system as claimed in claim 25, wherein a back of said belt is covered by a second fabric.

44. (Previously Presented) Control system as claimed in claim 43, wherein said second fabric is externally coated by a second resistant layer.

45. (Previously Presented) Control system as claimed in claim 44, wherein said second resistant layer is the same as said first resistant layer.

46. (Previously Presented) Control system as claimed in claim 25, wherein said elastomeric material comprises fibers.

47. (Previously Presented) Control system as claimed in claim 46, wherein said fibers are present in an amount in weight between 0.5 and 15% with respect to said elastomeric material.

48. (Previously Presented) Control system as claimed in claim 25, wherein said toothed belt comprises, between the toothing and a back surface of said belt, sides treated with a polymer resistant to swelling.

49. (Previously Presented) Control system as claimed in claim 48, wherein the control system comprises a pad tensioner or a pad.

50. (Previously Presented) Control system as claimed in claim 39, wherein said resistant layer comprises said fluorinated plastomer in an amount in weight between 101 and 150 parts in weight with respect to said elastomeric material.

51. (Currently Amended) A toothed belt adapted for use in substantially continuous contact with oil or partly immersed in oil, the belt comprising a body, a plurality of teeth extending from at least a first surface of said body, said teeth being coated by a first fabric, and a plurality of resistant inserts, wherein said resistant inserts ~~are produced from~~ comprise fibers of at least a first and a second material and said first fibrous material entirely surrounds said second fibrous material; said first and second materials are chosen from the group consisting of glass fibers, aramid fibers, polyester fibers, PBO fibers, and ~~wherein the first material comprises glass fibers and the second material comprises carbon fibers, and twisted yarns of the first material are wound around a twisted yarn of the second material, covering the second material entirely;~~ wherein said resistant inserts have a modulus of greater than 28 N/mm

said body comprising as main elastomeric material a copolymer formed from a diene and from a monomer containing nitrile groups in a percentage between 33 and 49 weight percent with respect to the final copolymer.

52. (Cancelled)

53. (Cancelled)

54. (Currently Amended) The toothed belt as claimed in claim ~~53~~51, wherein said first material has a lower modulus with respect to said second material.

55. (Previously Presented) The toothed belt as claimed in claim 51, wherein, in section, said second material occupies a sectional surface between about 15% and about 75% of a total sectional surface of the body.

56. (Previously Presented) The toothed belt as claimed in claim 55, wherein, in section, said second material occupies a sectional surface between about 35% and 45% of a total sectional surface of the body.

57. (Previously Presented) The toothed belt as claimed in claim 51, wherein said resistant inserts have two twists in the same direction.

58. (Previously Presented) The toothed belt as claimed in claim 51, wherein said

resistant inserts have been treated with an RFL comprising a latex suitable to resist oils.

59. (Previously Presented) The toothed belt as claimed in claim 58, wherein said latex comprises an elastomeric material formed from a copolymer obtained from a diene monomer and a monomer containing nitrile groups.

60. (Previously Presented) The toothed belt as claimed in claim 59, wherein said copolymer is formed from a diene and from a monomer containing nitrile groups in a percentage between 33 and 49 weight % with respect to the final copolymer.

61. (Previously Presented) The toothed belt as claimed in claim 60, wherein said copolymer is formed from a diene and from a monomer containing nitrile groups in a percentage of 39 weight %.

62. (Previously Presented) The toothed belt as claimed in claim 51, wherein said fabric is externally coated by a resistant layer, which comprises a fluorinated elastomer, a first elastomeric material and a vulcanizing agent; and in that said fluorinated elastomer is present in said resistant layer in an amount greater than said first elastomeric material.

63. (Previously Presented) The toothed belt as claimed in claim 62, wherein said body comprises a mixture based on a second elastomeric material formed from a copolymer obtained from a diene monomer and a monomer containing nitrile groups.

64. (Previously Presented) The toothed belt as claimed in claim 62, wherein said resistant layer comprises said fluorinated plastomer in an amount in weight between 101 and 150 parts in weight with respect to said elastomeric material.

65. (Previously Presented) The toothed belt as claimed claim 62, wherein said fluorinated plastomer is polytetrafluoroethylene.

66. (Previously Presented) The toothed belt as claimed in claim 62, wherein a back of said belt is covered by a second fabric.

67. (Previously Presented) The toothed belt as claimed in claim 66, wherein said second fabric is externally coated by a second resistant layer.

68. (Previously Presented) The toothed belt as claimed in claim 67, wherein said second resistant layer is the same as said first resistant layer.

69. (Previously Presented) The toothed belt as claimed in claim 62, wherein said first elastomeric material comprises fibres.

70. (Previously Presented) The toothed belt as claimed in claim 51, wherein said toothed belt comprises, between the toothing and a back surface of said belt, sides treated with a polymer resistant to swelling.

71. (Previously Presented) The toothed belt as claimed in claim 51 wherein the toothed belt is configured to replace a chain in a timing control system without any dimensional variations being made to the timing control system.

72. (Currently Amended) A method of providing a belt for use with oil, the method comprising:

providing an oil-wet environment,

providing a toothed belt to operate in said oil-wet environment, said belt

comprising:

a body,

a plurality of teeth extending from at least a first surface of said body, said

teeth being coated by a first fabric, and

a plurality of resistant inserts;

wherein said resistant inserts comprise ~~twisted yarns produced from~~ fibers of at least a first and a second material and said first fibrous material entirely surrounds said second fibrous material;

said first and second materials are chosen from the group consisting of glass fibers, aramid fibers, polyester fibers, PBO fibers, and, wherein the first material comprises glass fibers and the second material comprises carbon fibers, and twisted yarns of the first material are wound around a twisted yarn of the second material, covering the second material entirely;
~~wherein said resistant inserts have a modulus of greater than 28 N/mm~~

said body comprising as main elastomeric material a copolymer formed from a diene and from a monomer containing nitrile groups in a percentage between 33 and 49 weight percent with respect to the final copolymer.

73. (Previously Presented) The method of claim 72 wherein the oil wet environment further comprises an oil spray.

74. (Previously Presented) The method of claim 72 wherein the oil wet environment further comprises an oil bath.

75. (Previously Presented) The method of claim 72 wherein the oil-wet environment is provided by an oil transport system configured to deliver oil at approximately 5.8 gallons/hour.

76. (Previously Presented) The method of claim 72 wherein the oil wet environment provides oil at a temperature of approximately 284°F.

77. (Cancelled)

78. (Cancelled)

79. (Currently Amended) The method of claim ~~78~~, 72 wherein said first material has a lower modulus with respect to said second material.

80. (Previously Presented) The method of claim 72, wherein, in cross-section, said second material occupies a sectional surface between about 15% and about 75% of the total sectional surface of the body.

81. (Previously Presented) The method of claim 80, wherein, in cross-section, said second material occupies a sectional surface between about 35% and about 45% of the total sectional surface of the body.

82. (Previously Presented) The method of claim 72, characterized in that said resistant inserts include two twists in the same direction.

83. (Cancelled)

84. (Cancelled)

85. (Cancelled)

86. (Previously Presented) The method of claim 72, wherein said resistant inserts have been treated with an RFL comprising a latex suitable to resist oils.

87. (Previously Presented) The method of claim 86, wherein said latex comprises an elastomeric material formed from a copolymer obtained from a diene monomer and a monomer

containing nitrile groups.

88. (Previously Presented) The method of claim 87, wherein said copolymer is formed from a diene and from a monomer containing nitrile groups in a percentage between 33 and 49 weight % with respect to the final copolymer.

89. (Previously Presented) The method of claim 88, wherein said copolymer is formed from a diene and from a monomer containing nitrile groups in a percentage of 39 weight %.

90. (Previously Presented) The method of claim 72, wherein said fabric is externally coated by a resistant layer, which comprises a fluorinated plastomer, a first elastomeric material and a vulcanizing agent; and in that said fluorinated plastomer is present in said resistant layer in an amount greater than said first elastomeric material.

91. (Previously Presented) The method of claim 90, wherein said body comprises a mixture based on a second elastomeric material formed from a copolymer obtained from a diene monomer and a monomer containing nitrile groups.

92. (Previously Presented) The method of claim 90, wherein said resistant layer comprises said fluorinated plastomer in an amount in weight between 101 and 150 parts in weight with respect to said first elastomeric material.

93. (Previously Presented) The method of claim 90, wherein said fluorinated

plastomer is polytetrafluoroethylene.

94. (Previously Presented) The method of claim 90, wherein the back of said belt is covered by a second fabric.

95. (Previously Presented) The method of claim 94, wherein said second fabric is externally coated by a second resistant layer.

96. (Previously Presented) The method of claim 95, wherein said second resistant layer is the same as said first resistant layer.

97. (Previously Presented) The method of claim 90, wherein said elastomeric material comprises fibers.

98. (Previously Presented) The method of claim 97, wherein said fibers are present in an amount in weight between 0.5 and 15% with respect to said elastomeric material.

99. (Cancelled)